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| APPLICATION NO.         | CATION NO. FILING DATE |               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |
|-------------------------|------------------------|---------------|----------------------|-------------------------|-------------------------|--|
| 09/909,181 07/19/2001   |                        | 07/19/2001    | Paul A. Farrar       | MICRON.170A             | 9085                    |  |
| 20995                   | 7590                   | 03/15/2002    |                      |                         |                         |  |
| KNOBBE                  | MARTE                  | NS OLSON & BE | EXAMINER             |                         |                         |  |
| SIXTEENT                | H FLOOR                |               | CHU, CHRIS C         |                         |                         |  |
| NEWPORT BEACH, CA 92660 |                        |               |                      | ART UNIT                | PAPER NUMBER            |  |
| 7                       |                        |               |                      | 2815                    |                         |  |
|                         |                        |               |                      | DATE MAILED: 03/15/2002 | DATE MAILED: 03/15/2002 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ·  | Application No.   | Applicant(s)   |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| _  | 09/909,181  | FARRAR, PAUL A.  |  |  |  |  |  |
| Offic Action Summary   | Examiner  | Art Unit   |  |  |  |  |  |
|  | Chris C. Chu  | 2815   |  |  |  |  |  |
| ` The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address Period for Reply   |   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period who is Failure to reply within the set or extended period for reply will, by statute, any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status | 36(a). In no event, however, may a reply be tire within the statutory minimum of thirty (30) day rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE  | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |  |
| 1) Responsive to communication(s) filed on   | <u> </u>  |  |  |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ Thi  | is action is non-final.   |  |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |  |  |  |  |  |  |
| Disposition of Claims  4)   Claim(s) 1 - 32 is/are pending in the application  | nn  |  |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdraw  |   |  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  | , in the state of |  |  |  |  |  |  |
| 6) Claim(s) is/are rejected.   |   |  |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |  |  |
| 8)⊠ Claim(s) <u>1 - 32</u> are subject to restriction and/o  | r election requirement.   |  |  |  |  |  |  |
| Application Papers   | ·   |  |  |  |  |  |  |
| 9) The specification is objected to by the Examine   | r.  |  |  |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.   |   |  |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.   |   |  |  |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.   |   |  |  |  |  |  |  |
| 12) The oath or declaration is objected to by the Examiner.  |   |  |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120  |   |  |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign  | n priority under 35 U.S.C. § 119(a  | a)-(d) or (f).   |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:   |   |  |  |  |  |  |  |
| 1. Certified copies of the priority documents  |   |  |  |  |  |  |  |
| 2. Certified copies of the priority documents  |   |  |  |  |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |   |  |  |  |  |  |  |
| 14) Acknowledgment is made of a claim for domesti  | c priority under 35 U.S.C. § 119(   | e) (to a provisional application).   |  |  |  |  |  |
| <ul> <li>a)           The translation of the foreign language provisional application has been received.</li> <li>15)           Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>  |   |  |  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  | 5) Notice of Informal   | y (PTO-413) Paper No(s)<br>Patent Application (PTO-152)  |  |  |  |  |  |
| S. Patent and Trademark Office   |   |  |  |  |  |  |  |



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## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1 26, drawn to a high density semiconductor structure, classified in class
     257, subclass 686.
  - II. Claims 27 32, drawn to a method of manufacturing a multichip cube structure,classified in class 438, subclass 1+.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as creating a plurality of voids in the insulating layer by using chemical vapor deposition.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, have acquired a separate status in the art because of their recognized divergent subject matter, and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.



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- 4. This application contains claims directed to the following patentably distinct species of the claimed invention:
  - i). Species I depicted in Fig. 4.
  - ii). Species II depicted in Fig. 5.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission

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may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Applicant is advised that the reply to this requirement to be complete must include an

election of the invention to be examined even though the requirement be traversed (37 CFR

1.143).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Chris C. Chu whose telephone number is (703) 305-6194. The

examiner can normally be reached on M-F (10:30 - 7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eddie C. Lee can be reached on (703) 308-1690. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 308-7382 for regular

communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0956.

Chris C. Chu Examiner

Art Unit 2815

c.c.

March 12, 2002

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800